AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of fabricating a ~~catadioptric~~ lens system, said method comprising:

fabricating a single ~~catadioptric~~ lens element having a bottom surface and an upper surface~~, the upper surface having a convex portion and a concave portion, both the convex and concave portions sharing a common axis of symmetry~~;

cutting apart the ~~catadioptric~~ lens element to form 2n pie-shaped segments, wherein n is an integer; and

reassembling the 2n pie-shaped segments to form the ~~catadioptric~~ lens system with n of the 2n pie-shaped segments being located above a common plane and the rest of the 2n pie-shaped elements being below the common plane.

2. (Currently Amended) The method of claim 1 wherein cutting the ~~catadioptric~~ lens element to form the 2n pie-shaped segments is accomplished by cutting along a set of planes each of which contains ~~the~~ a common axis.

3. (Original) The method of claim 1 wherein the 2n pie-shaped segments are identically shaped.

4. (Original) The method of claim 1 wherein n = 1.

5. (Original) The method of claim 1 wherein n = 2.

6. (Currently Amended) The method of claim 5 wherein each of the four pie-shaped segments is a 90° segment of the single ~~catadioptric~~ lens element.

7. (Original) The method of claim 1 wherein reassembling involves arranging each of the n pie-shaped segments that are above the common plane to be opposite to and aligned with a corresponding different one of the n pie-shaped segments that are below the common plane.

8. (Currently Amended) The method of claim [[1]] 17 wherein the convex portion is a reflective portion of the catadioptric lens element and the concave portion is a refractive portion of the catadioptric lens element.

9. (Original) The method of claim 1 wherein reassembling the four pie shaped segments relative to a common plane involves placing two of the four segments are above the plane with their bottom surfaces being substantially parallel to and facing the common plane and placing the other two of the four segments are below the common plane with their bottom surfaces substantially parallel to and facing the common plane.

10. (Original) The method of claim 9 wherein reassembling also involves orienting the four segments so that each one of the two segments above the common plane are aligned with and adjacent to a corresponding one of the two segments that are below the common plane.

11. (Original) The method of claim 10 wherein reassembling further involves orienting the two segments that are above the common plane so that they share an axis of symmetry and are radially opposite each other relative to that shared axis of symmetry.

12. (Currently Amended) A method of fabricating a ~~catadioptric~~ lens system, said method comprising:

fabricating a single ~~catadioptric~~ lens element having a bottom surface and an upper surface~~, the upper surface having a convex portion and a concave portion, both the convex and concave portions sharing a common axis of symmetry~~;

cutting apart the ~~catadioptric~~ lens element to form two identically pie-shaped segments; and

reassembling the two pie-shaped segments to form at least part of the ~~catadioptric~~ lens system with one of the two pie-shaped segments being located above a common plane and the other of the two pie-shaped elements being below the common plane, wherein the bottom surfaces of the two pie-shaped elements are facing each other and substantially parallel to the common plane, and wherein the two pie-shaped segments are aligned with each other.

13. (Currently Amended) The method of claim [[1]] 12 wherein cutting the ~~catadioptric~~ lens element to form the two pie-shaped segments is accomplished by cutting along a plane that contains ~~the~~ a common axis.

14. (Currently Amended) A method of fabricating a ~~catadioptric~~ lens system, said method comprising:

fabricating a single ~~catadioptric~~ lens element having a bottom surface, [[and]] an upper surface, ~~the upper surface having a convex portion and a concave portion, both the convex and concave portions sharing a common~~ and an axis of rotational symmetry;

cutting apart the ~~catadioptric~~ lens element to form four substantially identical segments, wherein cutting involves cutting the ~~catadioptric~~ element along at least one plane that contains the ~~common~~ axis; and

reassembling the four segments to form the ~~catadioptric~~ lens system with two of the four segments being located above a common plane and the other two of the four elements being below the common plane, wherein the reassembled four segments have their bottom surfaces substantially parallel to the common plane, and wherein each of the two segments that is above the plane is aligned with and adjacent to a corresponding different one of the two segments that are below the common plane.

15. (New) The method of claim 1, wherein the single lens element is a catoptric lens element.

16. (New) The method of claim 1, wherein the single lens element is a catadioptric lens system.

17. (New) The method of claim 16, wherein the upper surface of the lens element includes a convex portion and a concave portion, both the convex and concave portions sharing a common axis of symmetry.

18. (New) The method of claim 12, wherein the single lens element is a catoptric lens element.

19. (New) The method of claim 12, wherein the single lens element is a catadioptric lens element.

20. (New) The method of claim 19, wherein the upper surface of the lens element includes a convex portion and a concave portion, both the convex and concave portions sharing a common axis of symmetry.

21. (New) The method of claim 1, wherein the single lens element comprises a Fresnel surface.